## December 2004 - Early Action Compact Progress Report Greenville County



1. In an effort to keep our contact information updated; please provide the following information for your county:

	Name	Telephone	E-mail Address
Administrator/Manager	Joseph Kernell	864 467-7105	jkernell@greenvillecounty.org
EAC contact	John Owings or Sandra Yudice	(864) 467-7270	jowings@greenvillecounty.org
		(864) 467-7409	syudice@greenvillecounty.org

2. List any progress (if applicable) since your June 2004 submittal? (stakeholder meetings, events held; special projects; etc.)

Please refer to the Attachment 1 below for a summary of the list of air quality strategies adopted by Greenville County Council. This document is an abbreviated version of the document submitted as a part of the EAC. It contains a progress report on each of the strategies highlighted in blue.

3. Ir	March 2004	, the lo	cal Early	<b>Action</b>	Plan included emission reduction strategies to be implemented no later than April 2005.	Do you continue to be on schedule to implement
those	e strategies?	Yes:	Χ	No:		

4. What assistance is needed from our office to assist you in implementing the emission reduction strategies by April 2005?

We are developing draft bill to be presented to the SC House of Representatives in January 2005 that will offer reduced tax incentives for those who purchase low emitting vehicles. We will need the help and support in working this bill through the legislative process. Greenville County has also applied or will apply for several federal grants. If those grants are approved, the county staff may need help in implementing the grants.

5.	Are you aware of activities being held within your county that were not included in the March 2004 EAP (i.e., gas can exchange events; public outreach and educational events; "Grow" workshops; are there cities within your county designated as "Tree City USA", etc.)?						
6.	Do you have any requests for specific assistance from the Department and/or the EPA?						
7. If possible, please provide electronic signatures of person(s) completing this report  Supervisor/Manager/Administrator:  Date:							
EA	C Contact:	John H Owings Jı	·	Date: _December 2, 20	004		

## ATTACHMENT 1

To South Carolina Department of Health and Environmental Control

**Environmental Protection Administration** 

From: Greenville County South Carolina

Date: December 1, 2004

Reference: Summary of progress in implementing air quality strategies

Below is a summary of the air quality improvement strategies adopted by Greenville County as a part of the Early Action Compact. The original document is approximately 75 pages in length. The document has been reduced in length to 13 pages to allow a progress report to be attached to each of the strategies

Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
Support SCDHEC statewide efforts to reduce ozone levels.  Priority A	<ul> <li>A stakeholder group participated in the development of new DHEC regulations aimed at reducing NOx emissions. As a result, new regulations requiring Nox- BACT (Best Available Control Technology Economically Achievable), were adopted in mid 2004 and are now being implemented.</li> <li>Greenville County submitted a letter supporting the State Implementation Plan (SIP) during the public comment period in November 2004.</li> </ul>	Equivalent to removing 359,500 cars from the road or 7190 tons of VOC	Ongoing	Area: Countywide. Agency: SCDHEC, local governments.

Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
Designate an Ozone Action     Coordinator     Priority A	Greenville county appointed two Ozone Coordinators: John Owings and Sandra Yudice	Not applicable.	March 2003	Area: Countywide. Agency: local governments.

Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
3. Seek low sulfur fuels as early as possible. Priority A	The Committee has continued to coordinate with representatives of Colonial and Plantation pipelines, refiners. Based upon an unofficial status report from Kay Clamp width the SC Petroleum Institute ". We are fortunate in the Southeast because we receive much of our supply from the Gulf Coast, and 60% of the nation's refineries are in that area. A simple translation of that fact is that we are not dependant on one or two refineries for our fuel, and reap the benefits of a large number of refineries producing lower sulfur fuels.  As you know the maximum allowable sulfur level in gasoline for 2004 is 350 ppm with a corporate average of 120 ppm. Plantation Pipeline tests product entering their pipeline from every refinery, every daytheir average from this testing has been and is 150 ppm in gasoline. Colonial Pipeline is also testing product from its shippers; the average sulfur levels for gasoline batches entering their pipeline YTD 2004 are 145 ppm for fungible regular gasoline and 62 ppm for fungible premium. Colonial did note that these averages are not volume weighted; they did not, however, think there would much difference if it were volume weighted.		Ongoing	Area: Countywide Agency: local governments.

They also assumed that the regular and premium are averaged together for compliance.		
Both of the pipelines had the lower sulfur fuel in their facilities by late 2003; the fuel was at terminals serving S.C. by Jan. 2004, and was "on the street" by March 1, 2004".		

Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
Design and implement congestion management and Intelligent     Transportation System (ITS)     measures.     Priority A	<ul> <li>Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles;</li> <li>Greenville County is now in the process of implementing the congestion management plan on several major thoroughfares. Several more roads are scheduled for completion in 2005 and 2006.</li> <li>Cameras and variable message boards have been installed on I-85 through Anderson, Greenville and Spartanburg counties.</li> </ul>		2003 and ongoing	Area: Cities and Counties major corridors. Agency: GRATS, SPATS, and ANATS.

	Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
5.	Use of hybrid vehicles.	The County Administrator issued principles that will		Counties: 2004-2005.	Area: countywide.
	Priority A	guide County operations to improve air quality,		Other local governments	Agency: local
		which include considering purchasing low-emission		as soon as practical.	governments.

<del>-</del>		
which include considering purchasing law emission		
which include considering purchasing low-emission		
l		
vehicles such as Tier II compliant vehicles.		
verticies such as their it compliant verticies.		

Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
Use higher efficiency engines for school buses.     Priority A	<ul> <li>No local action has taken place on this strategy</li> <li>Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is working with SC Department of Education to obtain grants from EPA.</li> <li>Promote an Adopt-a-School-Bus program.</li> <li>Endorse a statewide recommendation for the State to take the lead.</li> </ul>		As soon as practical.	Area: countywide. Agency: State and local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
7a. Develop incentive programs and	WALKING/BIKING:		2004	Area: Multi-County.
opportunity for citizens to choose	Encourage local government to increase			Agency: Related
alternative transportation modes.	pedestrian/bicycle infrastructure spending (the			agencies.
	Upstate spends 2¢ per person compared to SC			
Establish intermodal connections with	spending 22¢ per person).			
an emphasis on mass transit	<ul> <li>Establish safer bike routes with better signs</li> </ul>			
Priority A	marking lanes and routes.			
	<ul> <li>Increase highway funding for bike paths, walking or</li> </ul>			
	mass transit including high-speed rail. Support the			
	federal transportation enhancement program.			
	Install bike racks on all transit vehicles to			
	encourage intermodal transportation. New buses			
	purchased through the state's bus purchase			

	program will have bike racks.  PARK and RIDE: Greenville County: The Greenville County Planning Commission, the Greenville Transit Authority and the Greenville Chamber are working together to develop a park and ride and ride share program for Greenville County. As the study progresses information will be shared with Anderson and Spartanburg to determine if the programs can include all three counties  • Establish mass transportation between a plant and a park-and-ride site. CARPOOLING:  • Work with local government to offer incentives for employees to car pool.  MASS TRANSIT:  • Offer a free trolley service running in a loop in downtown areas and nearby restaurants, especially during lunch hours;  • Research past feasibility studies on free downtown shuttles. Potential for sponsorship with local area restaurants and businesses for a lunch time shuttle - could defer the operational costs of the endeavor.		
7b. Offer free or reduced transportation cost on high ozone days.  Priority A	<ul> <li>Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation providers.</li> </ul>	2004	Area: Multi-County. Agency: local transit providers and related agencies.
7c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems. Priority A	Greenville County: The Greenville County Planning Commission has completed an up date of the County Zoning Ordinance. It was adopted by Greenville County Council on November 30, 2004. New provisions will eliminate minimum lot size requirements, encourage cluster developments, grant density bonuses for developments with access to public transportation, allow some commercial developments to include housing within the development among many other changes. This	2004	Area: Countywide. Agency: local transit authorities.

shift in the land use plan should reduce vehicle miles traveled and encourage use of transit		
services.		

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Support SCDHEC in evaluating and seeking reductions from major sources based on modeling.     Priority A	<ul> <li>Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant.</li> <li>The Williams Company has received DHEC permits to replace outdated "uncontrolled" compressors on the pipeline located in Duncan. Replacement of the compressors will begin in late 2004 and continue until late 2005. This will result in a significant Nox reduction for the upstate.</li> <li>Support NOx reduction strategies in the State Implementation Plan.</li> <li>Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emission NOx sources)</li> </ul>	2,000-4,000 tpy NOx from SIP Call Potential 500-1000 tpy NOx (Tier Two)	2005	Area: Countywide. Agency: local governments, Chambers of Commerce, utilities, business and industry.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
9. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).  Priority A	No local action has taken place on this strategy     Use funds generated from a license plate sales,     registration fees, or license plate tax program to     buy or repair high emitting vehicles from     individuals.  Purchase such vehicles from non-profit groups     such as the Kidney Foundation, Goodwill, Salvation     Army when they have been donated as charitable     gifts.  Consider accelerated vehicle retirement     (scrappage) programs to encourage vehicle owners		2005	Area: countywide. Agency: local governments.

to voluntarily retire their vehicles sooner than they would have otherwise.			
---	--	--	--

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Ban open burning of on-site commercial clearing debris during ozone season (April to October). Priority A	<ul> <li>DHEC adopted regulations in mid 2004 restricting open burning.</li> <li>DHEC encourages Anderson, Greenville, and Spartanburg to actively notify all residents that the statewide ban is now in force and violations are punishable by law.</li> </ul>		2004	Area: countywide. Agency: SCDHEC and local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed  Date for Implementation	Geographic Area and/or Local Government
Create incentives for the purchase of high efficiency and low emissions vehicles.     Priority A	A bill titled; An act concerning the promotion Of alternative use fuel, and hybrid propulsion System For transportation purposes has been drafted for submittal to the SC House of representatives in January 2005.		2005	Area: Statewide. Agency: State and county governments.
	In summary, the bill provides tax Credit for vehicles using alternative fuel or hybrid propulsion vehicles. The credit is allowed against the tax imposed by for the purchase of vehicles licensed in South Carolina which use, or which are converted within 120 days of purchase to use, clean-burning fuel. Specifically the intent of the bill will apply for income tax			

years beginning on or after January 1,		
2004, but prior to January 1, 2013,. The		
tax credit will be allowed for the purchase		
of an alternative fuel or hybrid propulsion		
vehicle, and for a motor vehicle that is		
converted to use alternative fuel, for the		
replacement of the power source with a		
power source that uses alternative fuel		

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
12. Use land-use and transportation planning to improve air quality. Priority A	Include air quality measures as a part of the land- use and transportation planning process.		2004	Area: countywide. Agency: local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
13. Implement a program to encourage use of green power. Priority A	<ul> <li>Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant.</li> <li>No local action has taken place on this strategy Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment. Research found that, currently, Duke Power does not offer a green power program in Upstate SC; and that there is no industry near the Enoree Landfill that could use or benefit from green power.</li> </ul>		2004	Area: countywide. Agency: local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Promote route efficiency for delivery vehicles, trash collection etc.     Priority A	<ul> <li>No local action has taken place on this strategy         Encourage business to consolidate distribution and         collection routes to improve efficiency and reduce         emissions from their fleets.</li> <li>Maximize route efficiency for public services such         as garbage collection, delivery vehicles, and other         vehicle trips to reduce fuel usage.</li> </ul>		2004	Area: countywide. Agency: Chambers of Commerce

Measure under Considerati	Detailed description of measure	Current assessment of emission reductions	Proposed  Date for Implementation	Geographic Area and/or Local Government
15. Establish a clean air partnership business and industry. Priority A	<ul> <li>No local action has taken place on this strategy         Encourage and coordinate alternate work         schedules such as staggered work hours for         business, industry and local governments.</li> <li>Establish park and ride lots serving perimeter         counties along major corridors.</li> <li>Make the public aware of the park-and-ride         concept: media could assist in publicizing which         programs are available.</li> <li>Encourage carpooling/vanpooling as an option         where employees living in the same area agree to         ride to work together rather than to drive their         individual vehicles to work.</li> <li>Consider parking facility controls that can include         employers offering a tax-free transit/vanpool         benefits and which limit the amount of parking and         encourage carpooling, mass transit, etc.</li> <li>Encourage telecommuting.</li> <li>Adopt a Bus Program.</li> <li>Develop funding to be used for matching grants         fund for several EAP Strategies.</li> <li>Develop a core competency and assisting the</li> </ul>	Significant in the area of grants and local non-local tax funds generation.	2004	Area: countywide. Agency: local governments, local business, and Chambers of Commerce.

	Upstate EAP group in writing grant proposal			
Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
16. Establish an active public awareness campaign. Priority A	<ul> <li>■ Greenville County: The DHEC Ozone Forecast is updated daily on the County Cable TV Channel (except for Sundays). The TV Weather channel also announces the Ozone Forecasts. Greenville County also has posted DHEC's link on the County's website (front) page for Ozone Forecast also. Alerts will resume during the 2005 ozone season.</li> <li>■ Reviewing and considering materials to be used during the 2005 public awareness campaign.</li> <li>■ Develop an editorial board to discuss air quality issues and development of a relationship with media.</li> <li>○ Use alert messages year round, not only during ozone season.</li> <li>○ Utilize public service announcements, newspapers, weather channels, and other media outlets to notify citizens of high ozone days.</li> <li>○ Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens.</li> <li>● Encourage health organizations to sponsor ozone alerts in media.</li> <li>● Enhance ozone awareness (Outreach - Communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing,</li> </ul>		2004	Area: countywide. Agency: local governments, local media, health organizations, and Chambers of Commerce.

telecommuting, etc.).	
<ul> <li>Develop a campaign to encourage things such as</li> </ul>	
refueling vehicles during evenings, not topping off	
tanks when refueling, using lawnmowers during	
evenings instead of during high ozone hours, using	
of electric lawn mowers.	
Develop a license plate program to generate	
revenue to implement the public awareness	
campaign.	
<ul> <li>Develop awareness program on tax savings for</li> </ul>	
purchasing high efficiency vehicles.	

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
17. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.  Priority A	<ul> <li>No local action has taken place on this strategy         Establish programs to research energy efficiencies         at local universities, e.g., Institute for Energy         Studies at Clemson University.</li> <li>Encourage business and industry to utilize the         research from these programs to make the best         decision concerning the purchase or upgrade of         furnaces and boilers.</li> <li>Encourage fuel cell and other hydrogen based         research.</li> </ul>		2005	/agency: local universities.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
18. Use of alternate fuels. Priority B	<ul> <li>No local action has taken place on this strategy Direct local Planning Commissions to identify areas where alternative fuels will be best suited.</li> <li>Encourage the use of alternate fuels;</li> <li>Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets.</li> </ul>		Ongoing	Area: Countywide. Agency: local businesses and local governments.

Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas.  • Assist with establishing alternative fuels for public fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas.
<ul> <li>Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles</li> <li>Greenville County currently operate 37 alternative fueled vehicles that could use unleaded fuel and ethanol; however, the County uses unleaded fuel as the County does not have the infrastructure to dispense ethanol. These vehicles replaced non-</li> </ul>
hybrid or non-alternative fueled vehicles.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
19. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes. Priority B	<ul> <li>No local action has taken place on this strategy Evaluate use of HOV on three (3) lane interstate highways;</li> <li>Show the advantages of designating HOVs;</li> <li>Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour).</li> <li>Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.</li> </ul>		2005	Area: Interstate limited access highways. Agency: SCDOT and SCDHEC.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Modify speed limits for optimum fuel efficiency.     Priority B	<ul> <li>No local action has taken place on this strategy Direct SCDHEC and SCDOT to take the lead role.</li> <li>Direct Planning Commissions to assist SCDHEC in modeling.</li> </ul>		2005 or 2006	Area: Interstate highways. Agency: State Legislature and SCDOT.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
21. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.  Priority B	<ul> <li>No local action has taken place on this strategy Study impact of post construction traffic flow.</li> <li>Study impact of construction activities.</li> </ul>		2004	Area: countywide. Agency: local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
22. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods Priority B	<ul> <li>No local action has taken place on this strategy Eliminate minimum acreage requirements for school sites.</li> <li>Cap student populations per facilities.</li> <li>Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals.</li> <li>Favor restoration and construction of community-based small schools over new construction of remote mega schools.</li> </ul>			Area: countywide. Agency: local governments, planning commissions, and school boards.